CLAIMS

We claim:

- 3 1. A pectin comprising soy pectinaceous material having a lightness index above about
- 4 85 L.
- 1 2. The pectin of claim 1, wherein the lightness index is above about 87 L.
- 1 3. The pectin of claim 1, wherein the lightness index is above about 90 L.
- 1 4. The pectin of claim 1, wherein the pectin comprises about 40 wt.% galacturonic acid,
- 2 about 16 wt.% of a mixture of xylose and mannose, about 8 wt.% galactose, about 1.5 wt.%
- 3 rhamnose, about 4 wt.% glucose, about 2.5 wt.% arabinose, about 1.5 wt.% fucose, acout 1
- 4 wt.% Cellulose, about 8 wt.% protein and about 2% moisture.
- The pectin of claim 1, wherein the pectin has about 40% by weight galacturonic acid
- and about 16% by weight of a mixture of xylose and mannose.
- 1 6. The pectin of claim 1, wherein the pectin has about 25% by weight of esterified sugar
- 2 residues and a methoxyl content of about 1.5%.
- 7. The pectin of claim 1, wherein the pectin has a degree of acetylation of about 25%.
- 1 8. The pectin of claim 1, wherein the pectin has a molecular weight of about 21 kD.
- 1 9. The pectin of claim 1, wherein the pectin has an AGA purity of about 55%.
- 1 10. The pectin of claim 1, wherein the pectin has an AGA purity above 60%.

1 11. A method for producing soy pectin comprising the steps of: extracting a soybean hull/hypocotyl mixture in a mineral acid at an elevated 2 3 temperature and for a time and at a pH sufficient to extract a pectinaceous soy material from 4 the mixture; 5 cooling the extracted pectinaceous material and raising the pH; separating the extract from the solid residue; 6 precipitating the pectinaceous material in an alcohol; and 7 8 drying the pectinaceous material to form soy pectin. The method of claim 11, further comprising the step of: 1 12. 2 pre-washing the hull/hypocotyl mixture in the presence of a solvent for a time and 3 temperature sufficient to produces a pre-extraction mixture has a percent transmittance above about 35% on liquid. 4 The method of claim 12, further comprising the step of: 1 13. soaking the washed hull/hypocotyl mixture in the presence of a solvent for a time, 2 temperature and pH sufficient to expand the cellular matrix of the washed mixture. 3 14. The method of claim 11, further comprising the step of: 1 post-washing the precipitated pectinaceous material with pressing in the presence of 2 a solvent sufficient number of times to wash the material. 3 1 15. The method of claim 14, wherein the post-washing step comprising: 2 three 70% 2-propanol washings and two 100% 2-propanol washings with pressing after each washing. 3

- 1 16. The method of claim 14, further comprising the step of:
- 2 slowly evaporating the 2-propanol from the pectinaceous material for a time sufficient
- 3 to enhance the whiteness of the pectin product.
- 1 17. The method of claim 11, further comprising the step of:
- 2 evaporating the pectinaceous material under a vacuum at an elevated evaporation
- 3 temperature.
- 1 18. The method of claim 11, further comprising the step of:
- 2 grinding the pectin product.
- 1 19. A food stuff comprising a soy pectinaceous material having a lightness index above
- 2 about 85 L.
- 1 20. A food additive comprising a soy pectinaceous material having a lightness index
- 2 above about 85 L.